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## Improvement in LED circuits, especially for vehicles, signalisation lights and control panels

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**Cited documents:**

EP0695112  
EP0633163  
EP0660648

### Abstract of EP0793403

The illumination circuit includes three parallel branches of LEDs forming "i" lines and "j" columns. The network is connected with each branch connected in series and individual LEDs paralleled up, forming a total of "ij" LEDs. Some of the branches have resistors in parallel (22,23). Each LED circuit has a series resistance and zener diode (R<sub>i</sub>) placed in series with it.

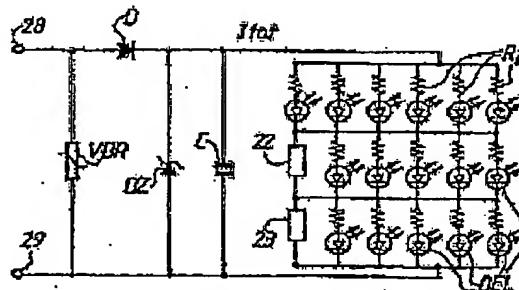


FIG.2

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